

# PATENT COOPERATION TREATY



From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
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## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

Date of mailing (day/month/year)	31. 5. 2005
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Applicant's or agent's file reference  
R04299PCT

### FOR FURTHER ACTION

See paragraph 2 below

International application No.  
PCT/JP2005/002951

International filing date (day/month/year)  
17.02.2005

Priority date (day/month/year)  
18.02.2004

International Patent Classification (IPC) or both national classification and IPC  
IntCl.<sup>7</sup> H03K17/08, G05F1/56, H03K17/687

Applicant  
RICOH COMPANY, LTD.

#### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

#### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

#### 3. For further details, see notes to Form PCT/ISA/220.

Date of completion of this opinion		12.05.2005	
<b>Japan Patent Office</b> 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Name and mailing address of the ISA/JP	Authorized officer	5X
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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/002951

**Box No. I      Basis of the opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/002951

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	3-9	YES
	Claims	1, 2, 10	NO
Inventive step (IS)	Claims	5-8	YES
	Claims	1-4, 9, 10	NO
Industrial applicability (IA)	Claims	1-10	YES
	Claims		NO

**2. Citations and explanations**

Document 1: JP 2002-231949 A (NEC Kansai Co., Ltd.) 2002.08.16, column 11, Fig.1

Document 2: JP 2002-100972 A (Matsushita Electric Industrial Co., Ltd.) 2002.04.05, column 30, Fig.3

Document 3: JP 2000-509933 A (KONINKLUKE PHILIPS ELECTRONICS N.V.) 2000.08.02, lines 16-26, page 4, Fig.7a

The subject matters of claim 1, 2 and 10 do not meet the requirement of novelty. Document 1 discloses products which are regarded to fall within the definition of "one switching element", "a voltage-generating circuit" and "a control circuit" in the present Claim 1 and 2.

The subject matters of claim 3 and 4 do not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 2 cited in the same. The person skilled in the art would easily conceive the idea of applying the technical feature of clamping an input voltage employed in document 2 to the invention disclosed in document 1.

The subject matter of claim 9 does not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 3 cited in the same. Document 3 discloses products which are regarded to fall within the definition of "a reference-voltage generating circuit" and "a comparator circuit" in the present Claim 9.

The subject matters of claim 5-8 are neither disclosed in any of the documents cited in the ISR nor obvious to a person skilled in the art.

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